AMENDMENTS TO THE SPECIFICATION:

Replace the paragraph beginning at line 6 of page 1 in its entirety with the following amended paragraph:

A conventional type of segmented mold for curing pneumatic tires utilizes upper and lower mold sections, with the top mold section being vertically movable with respect to the bottom mold section between a raised open position and a lower closed position. The interior of the top and bottom mold sections are bowl-shaped and each contain a plurality of arcuate tread segments arranged in a circular pattern. The tread segments are each formed with radially inwardly extending tread groove-defining lugs. When the top mold section is in its open raised position, the tread segments of the mold section are arranged radially outwardly of the outer diameter of the uncured tire to be molded. When the top mold section is moved to its closed lower position, the tread segments of both the top and bottom mold sections are automatically cammed radially inwardly by the sloping sides of the bowls of such mold sections so that the tread-defining lugs of the segments engage the uncured crown of the tire during curing of the tire. As the tread segments of the lower mold section move radially inwardly they travel downwardly along the sloping sides of the lower mold section bowl. When the tire has been cured, the top mold section is raised and the upper and lower tread segments automatically move outwardly from the cured tire so that such tire can be withdrawn from the bottom mold section. Examples of segmental molds are shown in U.S. Patent No. 5,676,980 to Gulka et al., U.S. Patent No. 3,787,155 to Zangl, and U.S. Patent No. 3,806,288 to Materick. Another example of a

segmental mold is shown in my U.S. Patent Application Serial No. 09/948,398 filed September 6, 2001, now Patent No. 6,632,393.

Replace the paragraph beginning at line 7 of page 2 in its entirety with the following amended paragraph:

The top and bottom mold sections of a segmental mold are generally formed of steel while the tread segments are formed of aluminum, steel or iron. The tire curing operation requires that the mold sections be heated to a high temperature, with heat from the mold sections being transferred to the tread segments. The outer surface of the tread segments have a curvature which match the inner arcuate surface of the lower and upper mold sections only when the tread segments have traveled inwardly to their closed tire molding position. When the tread segments are arranged in their open position the curvature of their outer surface is less than the curvature of the inner surface of their respective mold sections. Accordingly, the contact area between the rear outer surface of the tread segments and the inner surface of the bowl of the mold sections varies as the tread segments travel vertically towards their fully closed position within the bowls of the lower and upper mold section bowls, such contact area being narrow at the open position of the tread segments and being about equal to the width of the tread segments when the tread segments are at their closed position. As the tread segments slide vertically along the sloping sides of the lower and upper mold sections' bowl their lugs engage the uncured circumferential area of the tire being molded causing the uncured rubber of the tire to force the tread segments radially outward with considerable pressure.

Simultaneously, vertical travel of the tread segments create a radially inwardly directed force upon the tread segments causing the tread segments to generate considerable friction as they slide along the inner surface of the steel bowls of the open lower mold segments. Where the tread segments are formed of aluminum, such friction can often result in an instantaneous binding of a small area of the aluminum material on the outer surface of a tread segment to the inner surface of the steel material of the mold segment bowl. This binding can effect instantaneous tearing of a portion of the tread segment aluminum material out of the outer surface of such tread segment. When this occurs, particles of the aluminum material will be torn away from the rear surface of the tread segments so as to define a vertically extending groove in the outer surface of the tread segment as the tread segment undergoes vertical travel towards its closed position. The aluminum particles torn out of the groove balls-up in the space between the outer surface of the tread segment and the inner surface of the mold bowl, so as to wedge the affected tread segment radially inward away from contact with the bowl creating a gap between the outer surface of the tread segment and the inner surface of the bowl. Such gap blocks the flow of heat from the mold section into the damaged tread segment whereby the temperature of the tread segment adjacent the gap is reduced to the extent that undercuring of the tire can occur adjacent the gap. Also, since the damaged tread segment is forced radially inwardly away from the bowl, the tire assumes an out-of-round shape when it is being cured. It then becomes necessary to remove the affected tread segment from the mold bowl, file off the balled-up tread segment material, apply new lubricant to the rear surface of the tread segments, as well as the inner surface of the mold

section bowl, and replace the repaired tread segment in the bowl. These corrective operations are labor intensive and also precludes use of the mold to cure tires during such corrective operations. If the tread segments are formed of steel, such segments can weld to the bowl as they slide along the inner surface of the bowl.

Replace the paragraph beginning at line 4 of page 9 in its entirety with the following amended paragraph:

With continued reference to Figs. 1-7, base plate 20 is formed at its outer portion with a plurality of auxiliary lugs 66 that define a downward extension of lugs 36 of each bottom tread segment BS. Similarly, the top plate 39 is formed at its outer portion with a plurality of auxiliary lugs 68 that define an upward extension of lugs 51 of the upper tread segments US. A segmental mold generally corresponding to the above segmented mold is shown and described in my aforementioned co-pending Patent Application Serial No. 09/948,398, filed September 16, 2001, now Patent No. 6,632,393.